UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,202	12/30/2000	David A. Eatough	42390P10210	8106

8791 7590 04/06/2006

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER	
NGUYEN, QUANG N	
ART UNIT	**PAPER NUMBER**
2141	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,202	EATOUGH, DAVID A.	
	Examiner	Art Unit	
	Quang N. Nguyen	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

1. This Office Action is responsive to the Amendment filed on 02/03/2006. Claims 1, 23 and 28 have been amended. Claims 1-32 remain for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 9-10, 15-18, 20, 22-25, 27-30 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilbert et al. (US 6,771.595), as "Gilbert".

4. As to claim 1, Gilbert teaches a method of managing network related tasks on a network, comprising:

(a) registering, in a task pool of said network related tasks *(the host computer 12 manages a pool of network resources 21 to allocate network bandwidth to different networks such as engineer, accounting and marketing networks, i.e., manages network related tasks, inherently, said network related tasks have been registered with the host computer 12 in order for the host computer 12 to manage)* (Gilbert, C7: L7-30);

(b) assigning a priority value to each of said network related tasks, wherein said priority value is based at least in part on network bandwidth to be employed in order to process said network related tasks *(the engineering department may use a larger amount of network bandwidth than the accounting or marketing department so the resource controller 34 designates the engineering department network as having highest priority associated with the NIC 16A)* (Gilbert, C7: L31-34);

(c) periodically monitoring available network bandwidth on said network *(the resource controller 34 can also use the expert system 33 to monitor and predict the network traffic)* (Gilbert, C5: L12-18 and C7: L48-51); and

(d) processing said network related tasks based at least in part on the priority values and the available network bandwidth, wherein said network related tasks requiring bandwidth equal to or less than the available network bandwidth are processed based on the assigned priority value of each of said network related tasks *(the resource controller 34 increases the amount of bandwidth allocated to the engineering department network based on its highest assigned priority, by allocating a majority of the available network resources 21 first to the engineering department network associated with NIC 16A to transmit and receive network packets)* (Gilbert, C7: L43-46).

5. As to claim 2, Gilbert teaches the method of claim 1, further comprising: creating the task pool based at least in part on a pool of uncompleted network related tasks *(performing load balancing of network tasks/requests among the NICs 16A-C)*.

6. As to claims 3-4, Gilbert teaches the method of claim 2, further comprising: entering additional network related tasks into the task pool through a user interface *(inherently, a system administrator or an operator can enter/add/request a network task directly to the host computer 12)* or automatically via a computer system coupled to said network *(a client workstation may request a network server to download an operating system over the network for client boot up)* (Gilbert, C3: L50-52).

7. As to claim 5, Gilbert teaches the method of claim 1, further comprising updating the task pool based at least in part on completed tasks *(based on the current monitored network traffic, the resource controller 34 determines the receive path 40 is not currently receiving packets, i.e., completed task, the resource controller reallocates network resources from the receive path 40 to the transmit path 36, i.e., updating the task pool)* (Gilbert, C3: L11-15 and C4: L13-31).

8. As to claim 6, Gilbert teaches the method of claim 1, wherein the priority value for at least one task of said network related tasks is determined based at least in part on the file size of said at least one task *(since the accounting department rarely requests large files from the host computer 12, less network resource is allocated to the NIC 16B, i.e., lower priority compared to the engineering department with NIC 16A with highest priority)* (Gilbert, C7: L32-43).

9. As to claims 9, Gilbert teaches the method of claim 1, wherein processing at least one task of said network related tasks comprises executing a command line in said at least one task of said network related tasks *(inherently, in computer systems, tasks are called/executed upon an instruction, i.e., a command line, to execute)*.

10. As to claim 10, Gilbert teaches the method of claim 1, wherein processing said network related tasks comprises initiation by a resident application, wherein a resident application further comprises software capable of initiating tasks *(the DERPA system 30 operates in conjunction with the Netware program, includes a statistic monitoring agent that monitors network traffic patterns tracked in the NIC 16)* (Gilbert, C3: L11-45).

11. Claims 15-18, 20 and 22 are corresponding method claims of claims 1-5; therefore, they are rejected under the same rationale.

12. Claims 23-25 and 27 are corresponding article claims of method claims 1-6; therefore, they are rejected under the same rationale.

13. Claims 28-30 and 32 are corresponding system claims of method claims 1-6; therefore, they are rejected under the same rationale.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 7-8 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, in view of Applicant's Admitted Prior Art, hereinafter referred as AAPA.

16. As to claim 7, Gilbert teaches the method of claim 1, but does not explicitly teach wherein periodically monitoring available network bandwidth comprises sending a PING or a bandwidth PING across said network and receiving an echo or a bandwidth response across said network.

However, AAPA teaches that sending a PING or a bandwidth PING across said network and receiving an echo or a bandwidth response across said network is well-known and commonly used in the art to determine the connectivity and reliability of nodes on a given network *(for PING requests)* and to provide an estimated measurement of bandwidth *(for BING requests)* to categorize a network connection into a class, category or any other type of network connection (AAPA, page 4, line 14 – page 5, line 10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Gilbert and AAPA to include sending a PING or a bandwidth PING across said network and receiving an echo or a bandwidth response across said network since such methods were conventionally employed in the art allow the system to determine the connectivity and reliability of nodes on a given network *(for PING requests)* and to provide an estimated measurement of bandwidth *(for BING requests)* to categorize a network connection into a class, category or any other type of network connection (AAPA, page 4, line 14 – page 5, line 10).

17. As to claim 8, Gilbert-AAPA teaches the method of claim 1, wherein monitoring available network bandwidth comprises transferring a data file across a network, and determining an estimate of available bandwidth based at least in part on the elapsed time to transfer said data file *(the process for estimating network bandwidth employing BING includes, typically, transmitting a packet of known size across a network, measuring the throughput time of the packet, and estimating bandwidth based at least in part on this information)* (AAPA, page 5, lines 5-13).

18. Claims 11-12 are corresponding method claims of claims 1 and 7; therefore, they are rejected under the same rationale.

19. As to claims 13, Gilbert-AAPA teaches the method of claim 11, wherein said PING and said echo response substantially conform to Internet Control Message Protocol (ICMP) (AAPA, page 4, lines 14-17).

20. As to claim 14, Gilbert-AAPA teaches the method of claim 11, wherein said bandwidth PING and said bandwidth echo substantially conform to Beyssac protocol (AAPA, page 5, lines 2-5).

21. Claims 19, 21, 26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, in view of Miller et al. (US 5,920,701), hereinafter referred as Miller.

22. As to claim 19, Gilbert teaches the method of claim 15, but does not explicitly teach wherein assigning a priority value includes obtaining the priority value from an external source.

In a related art, Miller teaches a system and method for scheduling data transmission, wherein a network resource scheduler determines the distribution schedules for each of requested distribution of content data based on the time the request was made/received, the delivery time, the size of the content data, and the priority level assigned to the content source obtained from the request signals or via network 24 *(i.e., assigning a priority value includes obtaining the priority value from an external source)* (Miller, C6: L35-40).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Gilbert and Miller to include obtaining the priority value from an external source associated with the requests/tasks since such methods were conventionally employed in the art to allow the system to use the parameters associated/included in the requests to determine/assign the priority for the requests/tasks in order to ensure that the most important requests/tasks would be set a highest priority and would be handled/executed first.

23. As to claim 21, Gilbert-Miller teaches the method of claim 15, wherein assigning a priority value comprises comparing the estimated network bandwidth with available network bandwidth on said network *(after determining the actual bandwidth using the pathway bandwidth, i.e., using the estimated network bandwidth, the scheduler 10 can account for different priority levels by weighting the number of high priority content sources, resulting in an award of greater bandwidth to the high priority content sources, i.e., resulting in assigning a high priority value to a particular request or task)* (Miller, C8: L50-63 and C14: L24-43).

24. Claims 26 and 31 are corresponding article and system claims of method claim 19; therefore, they are rejected under the same rationale.

Response to Arguments

25. In the remarks, Applicant argued in substance that

(**A**) Prior Art does not teach or suggest "(a) registering network related tasks in the task pool", as recited in claim 1.

As to point (**A**), **Gilbert** the host computer 12 manages a pool of network resources 21 to allocate network bandwidth to different networks such as engineer, accounting and marketing networks, i.e., manages network related tasks, inherently, said network related tasks have been registered with the host computer 12 in order for the host computer 12 to manage (i.e., registering network related tasks in the task pool) **(Gilbert, C7: L7-30).**

(**B**) Prior Art does not teach or suggest "(b) assigning a priority value to each of said network related tasks, wherein said priority value is based at least in part on network bandwidth to be employed in order to process said network related tasks", as recited in claim 1.

As to point (**B**), before addressing the argument, Examiner submits that the language of the limitation cited in the quotation "network related tasks" can be given the broadest and reasonable interpretation in light of specification as tasks/processes that are running on a computer in a networking environment *(for example, allocating network bandwidth to different networks such as the company engineer, accounting, and marketing department networks)*. Here, **Gilbert** teaches the host computer 12 manages

a pool of multiple NICs 16A-C, each communicating with different networks such as the company engineering, accounting, and marketing department networks *(i.e., manages network related tasks)*, wherein the engineering department network may use a larger amount of network bandwidth than the accounting or marketing department so the resource controller 34 designates the engineering department network associated with the NIC 16A as having highest priority *(i.e., assigning a priority value to each of said network related tasks, wherein said priority value is based at least in part on network bandwidth to be employed in order to process said network related tasks)* **(Gilbert, C7: L31-34).**

(**C**) Prior Art does not teach or suggest "processing the one or more network tasks based on a priority ranking for each of the one or more network tasks and available bandwidth, wherein said network related tasks requiring bandwidth equal to or less than the available network bandwidth are processed based on the assigned priority value of each of said network related tasks", as claimed in claim 1.

As to point (**C**), **Gilbert** teaches since the engineering department may use a larger amount of bandwidth than the accounting or marketing department which rarely requests large files from the host computer 12 *(i.e., based on the requiring bandwidth of the network related tasks)*, so the resource controller 34 designates the engineering department network as having highest priority *(i.e., assigning a priority value to the network related task)* **(Gilbert, C7: L31-34).** **Gilbert** also teaches the resource controller 34 increases the amount of bandwidth allocated to the engineering department network based on its assigned highest priority *(i.e., based on the assigned*

priority ranking), by allocating a majority of the available network resources 21 first to the engineering department network to transmit and receive network packets *(i.e., wherein said network related tasks requiring bandwidth equal to or less than the available network bandwidth are processed based on the assigned priority value of each of said network related tasks)* **(Gilbert, C7: L31-51).**

(**D**) Prior Art does not teach or suggest "processing the one or more network tasks based on a priority ranking for each of the one or more network tasks and available bandwidth", as claimed in claim 11.

As to point (**D**), **Gilbert** teaches since the engineering department may use a larger amount of bandwidth than the accounting or marketing department which rarely requests large files from the host computer 12 *(i.e., based on the requiring bandwidth of the network related tasks)*, so the resource controller 34 designates the engineering department network as having highest priority *(i.e., assigning a priority value to the network related task)* **(Gilbert, C7: L31-34).** **Gilbert** also teaches the resource controller 34 increases the amount of bandwidth allocated to the engineering department network based on its assigned highest priority *(i.e., based on the assigned priority ranking)*, by allocating a majority of the available network resources 21 first to the engineering department network to transmit and receive network packets *(i.e., processing the one or more network tasks based on a priority ranking for each of the one or more network tasks and available bandwidth)* **(Gilbert, C7: L31-51).**

26. Applicant's arguments as well as request for reconsideration filed on 02/03/2006 have been fully considered but they are not deemed to be persuasive.

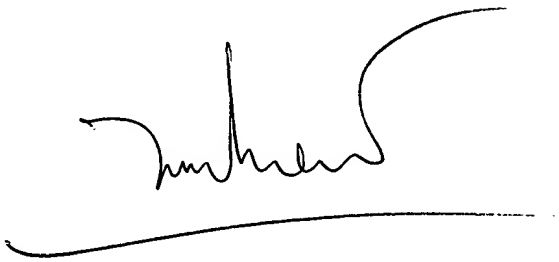
27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QUANG N. NGUYEN
EXAMINER